

MG Checklist

Spencer Smith

November 17, 2025

- Follows writing checklist (full checklist provided in a separate document)
 - L^AT_EX points
 - Structure
 - Spelling, grammar, attention to detail
 - Avoid low information content phrases
 - Writing style
 - Hyperlinks should be done properly (\ref)
- Module Decomposition
 - One module one secret (unless an explicit exception is made, with a good reason) - all “and”s should be checked.
 - The uses relation is a hierarchy.
 - Secrets are nouns (generally).
 - Traceability matrix between modules and requirements shows every requirement is satisfied by at least one module
 - Traceability matrix between modules and requirements shows that every module is used to satisfy at least one requirement
 - Traceability matrix between likely changes and modules shows a one to one mapping, or, if this is not the case, explains the exceptions to this rule.
 - Level 1 of the decomposition by secrets shows: Hardware-Hiding, Behaviour-Hiding and Software Decision Hiding.

- Behaviour-Hiding modules are related to the requirements
 - Software-Decision hiding modules are concepts that need to be introduced, but are not detailed in the requirements
 - Each Software Decision Hiding module is used by at least one Behaviour-Hiding Module (if this isn't the case, an explanation should be provided)
 - Uses relation is not confused with a data flow chart. If you can imagine an “import B” statement in the code for module A, then module A uses module B.
 - The arrow in the uses relation points from module A to module B when module A uses module B
 - Anticipated changes are a superset of the likely changes in the SRS
 - If there is a “control” module, it should be at the top of the hierarchy
 - Ideally the uses relation is drawn with all uses arrows pointing down, with clear layers for the hierarchy
- MG quality
 - Follow template
 - Low coupling
 - Satisfies information hiding
 - Figures can be zoomed in on (pdf better than bitmap for zooming)